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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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### Office Action Summary

**Application No.**

10/699,774

**Applicant(s)**

SUEHIRO, MASAKO

**Examiner**

ALBERT H. CUTLER

**Art Unit**

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6, 8 and 10 is/are allowed.
- 6) ☒ Claim(s) 7, 9 and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This office action is responsive to communication filed on July 2, 2008. Claims 1-11 are pending in the application and have been examined by the Examiner.

***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 9, 2008 has been entered.

***Response to Arguments***

3. Applicant's arguments filed June 9, 2008, with respect to claim 7, have been fully considered but they are not persuasive.
4. Applicant argues that Niikawa does not disclose a second communication mode for enabling the digital camera to function as an external recording device by receiving and recording images transferred from the PC, or that the digital camera has an automatic mode switching device which automatically switches between the first communication mode and the second communication mode in the first communication device. Applicant further argues that Anderson does not disclose an automatic mode switching device in the camera.

5. The Examiner respectfully submits that one cannot show non-obviousness by attacking references individually where, as here the rejections are based on a combination of references. In re Keller, 208 USPQ 871 (CCPA 1981). The Examiner contends that Niikawa teaches an automatic mode switching device (See 134-137, 1309, figure 11), and that the combination of Niikawa, Anderson and Fujiwara teaches a second communication mode for enabling the digital camera to function as an external recording device by receiving and recording images transferred from the PC, and that the digital camera has an automatic mode switching device which automatically switches between the first communication mode and the second communication mode in the first communication device, as discussed in the previous and current rejection of claim 7.
6. Therefore the rejection of claim 7 is maintained by the Examiner.

### ***Claim Objections***

7. Claims 7, 8, 9, 10 and 11 are objected to because of the following informalities:  
Lack of clarity and precision.
8. It has been held that the recitation that an element is "capable of" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.
9. Claims 7, 8, 9 (twice), 10 and 11 all recite elements "capable of" performing functions. Appropriate correction is required.

10. Claim 10 additionally recites, "a first communication mode capable of sending **the** image selected by the image sending apparatus to **the** external device." However, an image selected by the image sending apparatus and an external device have not been previously defined. The Examiner will interpret "the image" and "the external device" to read "an image" and "an external device". Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Niikawa(US 6,819,355) in view of Anderson et al.(US 7,107,516), hereinafter referred to as Anderson.

Consider claim 9, Niikawa teaches:

An image sending and receiving system (figure 5), comprising:  
an image sending apparatus (digital camera, 1, figures 1-5) which comprises:  
an image capturing device (303, figure 4) which captures an image (column 4, lines 32-38);

a first communication device (213, the first communication device is the camera side of a USB connection, column 5, line 67 through column 6, line 3, column 6, lines 63-66, column 7, lines 60-67) which has a first communication mode capable of sending the image selected by the image sending apparatus to the external device (During a reproduction mode, the switches 6 and 7 are used to select an image, and the camera sends the image to a personal computer (1000), column 4, lines 9-20, column 7, lines 10-38.), and

a second communication mode for enabling the image sending device to function as an external recording device (The second mode is a photographing mode, and this mode is considered a communication mode as it is operable from the PC side, and images displayed on the camera display are also displayed on the PC, column 4, lines 9-20, column 7, lines 32-67, column 10, line 5 through column 11, line 7.);

a transfer instruction device which sends a first instruction to an external device for instructing the external device to receive the image sent from the image sending apparatus (The digital camera (1) sends the image currently being displayed in the display to the PC (1000), which image is chosen by switches 6 and 7, column 7, lines 32-38. Therefore, because the digital camera (1) sends the image, it acts as a transfer instruction device.); and

an automatic mode switching device which automatically switches at least to the first communication mode from the second communication mode in the first communication device upon receipt of a second instruction("mode change signal") from the external device(See column 10, line 41 through column 11, line 7. The digital camera can automatically switch modes, if instructed to do so by the PC, without the switching of the manual mode setting switch(14). See S134-S137, S1309, figure 11.); and

the external device(PC, 1000) includes an image receiving apparatus(The PC is the image receiving apparatus.) which comprises:

a second communication device(213, the second communication device is the personal computer side of a USB connection, column 5, line 67 through column 6, line 3, column 6, lines 63-66, column 7, lines 60-67.) which performs at least communication in the first communication mode(reproduction mode) with the image sending apparatus(column 6, line 63 through column 7, line 38); and

a mode switch control device capable of sending the second instruction to the image sending apparatus for instructing the image sending apparatus to be in the first communication mode, upon receipt of the first instruction from the image sending apparatus(A mode setting switch(c14) displayed on the computer display is used to switch between modes, column 8, lines 41-64, column 10, line 6 through column 11, line 7. See figure 11. The first instruction is received at S1302. The second instruction(S1309) is sent after(i.e. upon) the receipt of the first instruction.).

Niikawa teaches of sending image data in a first communication mode(see above), and that the image sending apparatus is capable of receiving and storing images in a second mode. However, Niikawa does not explicitly teach that said images are images transferred from the external device.

Anderson is similar to Niikawa in that Anderson teaches of a camera connected to a computer(figure 1), wherein images from the camera are viewed on the PC(column 3, lines 30-39, column 4, lines 1-5). Furthermore, Anderson similarly teaches that communication between the camera and PC is done via USB(column 4, lines 19-33). Anderson likewise teaches the manual and automatic selection of camera communication modes(column 5, lines 38-48).

However, in addition to the teachings of Niikawa, Anderson teaches of a communication mode in which images are transferred from the external device(PC) to the image sending device(camera, column 8, lines 4-9).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to have the second communication mode taught by Niikawa enable the image sending device to function as an external recording device by receiving and recording images transferred from the external device for the benefit of increasing the versatility and operability of the camera by enabling a seamless two-way transmission between the camera, PC, and internet(Anderson, column 8, lines 4-9).



14. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Niikawa(US 6,819,355) in view of Anderson et al.(US 7,107,516), hereinafter referred to as Anderson, and Fujiwara(US 2003/0085988).

Consider claim 7, Niikawa teaches:

An image sending apparatus(digital camera, 1, figures 1-5), comprising:

an image capturing device(303) which captures an image(column 4, lines 32-38);

a recording device(212) which records the captured image on a recording medium(memory card 8, column 5, lines 66-67, column 6, lines 34-39);

an image selecting device which selects a desired image of images recorded on the recording medium(Switches 6 and 7 are used to select images stored in memory, column 3, lines 36-47, column 6, lines 14-17, column 7, lines 10-13.);

a communication device(213, the communication device is the camera side of a USB connection, column 5, line 67 through column 6, line 3, column 6, lines 63-66, column 7, lines 60-67) which has a first communication mode capable of choosing an image and sending the image selected by the image selecting device to the external device(During a reproduction mode, the switches 6 and 7 are used to select an image, and the camera sends the image to a personal computer(1000), column 4, lines 9-20, column 7, lines 10-38.), and a second communication mode for enabling the image sending apparatus to function as an external recording device by receiving and recording images(The second mode is a photographing mode, and this mode is considered a communication mode as it is operable from the PC side, and images

displayed on the camera display are also displayed on the PC, column 4, lines 9-20, column 7, lines 32-67, column 10, line 5 through column 11, line 7.);

a transfer instruction device which outputs a transfer instruction for transferring the image selected by the image selecting device(6 and 7) to the external device(PC) through the communication device(The digital camera(1) sends the image currently being displayed in the display to the PC(1000), which image is chosen by switches 6 and 7, column 7, lines 32-38. Therefore, because the digital camera(1) sends the image, it acts as a transfer instruction device.); and

an automatic mode switching device which automatically switches between the first communication mode and the second communication mode in the communication device upon receipt of an order from the external device(See column 10, line 41 through column 11, line 7. The digital camera can automatically switch modes, if instructed to do so by the PC, without the switching of the manual mode setting switch(14), i.e. automatically rather than manually.); wherein

on receiving a conversion command ordering change to the first communication mode(S134, figure 11) from the external device(PC) through the communication device(213), the automatic mode switching device switches the communication mode of the communication device to the first communication mode(See S135-S137, column 10, line 63 through column 11, line 7).

Niikawa teaches of sending image data in a first communication mode(see above). However, Niikawa does not explicitly teach that the first communication mode is capable of sending an image capturing command to the external device. Also,

Niikawa teaches that the image sending apparatus is capable of receiving and storing images in a second mode. However, Niikawa does not explicitly teach that said images recorded for the external device.

Anderson is similar to Niikawa in that Anderson teaches of a camera connected to a computer (figure 1), wherein images from the camera are viewed on the PC (column 3, lines 30-39, column 4, lines 1-5). Furthermore, Anderson similarly teaches that communication between the camera and PC is done via USB (column 4, lines 19-33). Anderson likewise teaches the manual and automatic selection of camera communication modes (column 5, lines 38-48).

However, in addition to the teachings of Niikawa, Anderson teaches of a communication mode in which images are recorded for the external device (PC, column 8, lines 4-9).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to have the second communication mode taught by Niikawa enable the image sending device to function as an external recording device for the external device for the benefit of increasing the versatility and operability of the camera by enabling a seamless two-way transmission between the camera, PC, and internet (Anderson, column 8, lines 4-9).

However, although Niikawa and Anderson teach of sending images to a computer, the combination of Niikawa and Anderson does not explicitly teach that the first communication mode is capable of sending an "image capturing command" to the external device.

Fujiwara is similar to Niikawa in that Fujiwara teaches of a camera(5, figure 1) connected to a computer(8, figure 1), wherein images from the camera are viewed on the PC(paragraph 0071). Furthermore, Fujiwara similarly teaches that communication between the camera and PC is done via USB(paragraphs 0052, 0057, 0067, 0071).

However, in addition to the teachings of Niikawa and Anderson, Fujiwara teaches that the first communication mode is capable of sending an image capturing command to the external device(See S4-S7, figure 11, paragraphs 0084-0086. In an image reproduction mode similar to that of Niikawa, Fujiwara teaches that still images stored in the memory of the camera are transmitted to the PC. In order to transfer these images, the camera sends an image capturing command to the external device in the form of a bulk transfer request.).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to have the camera communicating in the reproduction mode taught by Niikawa and Anderson send an image capturing command to the external device as taught by Fujiwara for the benefit that the external device can then take the appropriate steps to ensure a transfer path and make the transfer of image data from the camera to the computer possible(Fujiwara, paragraph 0085).

15. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (US 6,577,338) in view of Sato (US 6,950,125).

Consider claim 11, Tanaka et al. teaches:

An image receiving apparatus(digital color printer, 102, figure 1), comprising:  
a communication device(communication driver, 13) which performs at least communication in a first communication mode with an image sending apparatus(The printer communicates with a digital camera(i.e. image sending apparatus, 101) through a communication cable in a reproduction(i.e. first ) communication mode, column 5, lines 35-49, column 7, lines 48-53.);

a recording device(image memory, 16) which, in the first communication mode, records an image received from the image sending apparatus(101) through the communication device(column 6, lines 29-33); and

a mode switch control device capable of confirming that the image sending apparatus is in the first communication mode, upon receipt of an instruction to record the image received from the image sending apparatus through the communication device(See figure 2. A print start key(22) is pressed in step S2, issuing an instruction to record the image received from the image sending apparatus through the communication device, column 7, lines 5-10. A mode switch control device confirms that the image sending apparatus is in the first communication mode in steps S4 and 4a, column 7, lines 48-53.).

However, Tanaka et al. does not explicitly teach that the instruction to record the image received from the image sending device comes from the image sending apparatus.

Sato similarly teaches a digital camera(100, figure 1) connected to a printer(200, figure 1).

However, in addition to the teachings of Tanaka et al., Sato teaches that the instruction to record the image received from the image sending device comes from the image sending apparatus(See column 7, lines 18-30, lines 63-68, figure 1. A release switch(101) on the camera(100) is used to transfer a photograph taken by the camera to be printed by the printer.).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to have the release switch taught by Sato included in the camera taught by Tanaka et al. such that the image sending apparatus can send record instructions to the image receiving apparatus for the benefit of eliminating the cumbersome operation of working with devices located at separate locations when printing the images from the camera(Sato, column 1, lines 24-32).

***Allowable Subject Matter***

16. Claims 1-6, 8 and 10 are allowed.
17. The following is a statement of reasons for the indication of allowable subject matter:

Consider claim 1, the prior art of record teaches an image sending and receiving system, comprising an image sending apparatus which comprises an image capturing device which captures an image, a recording device which records the captured image on a recording medium, an image selecting device which selects a desired image of images recorded on the recording medium, a first communication device which has a first communication mode capable of sending an image capturing command to an

external device and sending the image selected by the image selecting device to the external device, and a second communication mode for enabling the image sending device to function as an external recording device for the external device, a transfer instruction device which outputs a transfer instruction for transferring the image selected by the image selecting device to the external device through the first communication device, and an automatic mode switching device which automatically switches between the first communication mode and the second communication mode in the first communication device upon receipt of an order from the external device, and the external device includes an image receiving apparatus which comprises, a second communication device which performs at least communication in the first communication mode with the image sending apparatus, a recording device which records the image received through the second communication device, and a mode switch control device which orders the image sending apparatus to control a switch between the first communication modes mode and the second communication mode of the image sending apparatus, wherein, the mode switch control device of the image receiving apparatus determines whether or not the communication mode with the image sending apparatus is the first communication mode, and sends a conversion command ordering change to the first communication mode if determined that a current communication mode of the image sending apparatus is not the first communication mode, and on receiving the conversion command from the image receiving apparatus, the automatic mode switching device of the image sending apparatus switches the

communication mode of the first communication device to the first communication mode.

However, the prior art of record does not teach nor reasonably suggest that the mode switch control device of the image receiving apparatus controls the mode of the image sending apparatus based on checking that there has been the transfer instruction of the image from the transfer instruction device of the image sending apparatus as recited in claim 1.

Claims 2-6 are allowed as depending from an allowed claim 1.

Consider claim 8, the prior art of record teaches an image receiving apparatus, comprising a communication device which has a first communication mode capable of, on receiving an image capturing command from an image sending apparatus, capturing in the image receiving apparatus an image selected and sent by the image sending apparatus, and has a second communication mode enabling the image receiving apparatus to send images to the image sending device for storage therein, a recording device which records the image selected and sent by the image sending apparatus through the communication device, and a mode switch control device which sends an order to the image sending apparatus to control a switch between the first communication mode and the second communication, wherein, the mode switch control device determines whether or not the communication mode with the image sending apparatus is the first communication mode, and sends a conversion command for ordering change to the first communication mode if determined that a current



communication mode of the image sending apparatus is not the first communication mode.

However, the prior art of record does not teach nor reasonably suggest that the mode switch control device of the image receiving apparatus controls the mode of the image sending apparatus based on checking that there has been the transfer instruction of the image from the transfer instruction device of the image sending apparatus as recited in claim 8.

Consider claim 10, the prior art of record teaches an image sending apparatus, comprising an image capping device which captures an image, a first communication device which has a first communication mode capable of sending the image selected by the image sending apparatus to the external device, and a second communication mode for enabling the image sending device to function as an external recording device for the external device, a transfer instruction device which sends a first instruction to an external device for instructing the external device to receive an image sent from the image sending apparatus, and an automatic mode switching device which automatically switches at least to the first communication mode from the second communication mode in the first communication device upon receipt of a second instruction from the external device ordering the image sending apparatus to switch to the first communication mode from the second communication mode.

However, the prior art of record does not teach nor reasonably suggest that the second instruction is sent from the external device when the first communication device sends the first instruction as recited in claim 10.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALBERT H. CUTLER whose telephone number is (571)270-1460. The examiner can normally be reached on Mon-Thu (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc-Yen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/AC/  
09/25/2008

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